

**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/JP2004/013060

**A. CLASSIFICATION OF SUBJECT MATTER**  
Int.Cl<sup>7</sup> E05F15/18

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
Int.Cl<sup>7</sup> E05F15/00-15/20

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
Jitsuyo Shinan Koho 1922-1996 Jitsuyo Shinan Toroku Koho 1996-2004  
Kokai Jitsuyo Shinan Koho 1971-2004 Toroku Jitsuyo Shinan Koho 1994-2004

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 6-307157 A (Kabushiki Kaisha Berudekkusu), 01 November, 1994 (01.11.94), Claims 1 to 5; all drawings (Family: none)	1-6
A	JP 7-269227 A (Hitachi Cable, Ltd.), 17 October, 1995 (17.10.95), Claim 1; Par. Nos. [0012] to [0013]; all drawings (Family: none)	1-6
A	JP 10-8825 A (Heinrich Landert), 13 January, 1998 (13.01.98), Claims 1, 5, 6, 10, 17, 23; all drawings & DE 19613178 A1 & EP 0799962 A1 & US 6084367 A	1-6

Further documents are listed in the continuation of Box C.

See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search  
03 December, 2004 (03.12.04)

Date of mailing of the international search report  
21 December, 2004 (21.12.04)

Name and mailing address of the ISA/  
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 5-229756 A (Toshiba Corp.), 07 September, 1993 (07.09.93), Par. No. [0074] (Family: none)	1-6
A	JP 2000-194854 A (Oki Electric Industry Co., Ltd.), 14 July, 2000 (14.07.00), Par. No. [0067] (Family: none)	1-6